

SYSTEMS AND PROGRAMMING MANAGER

DEFINITION: Under general supervision, performs professional, technical and supervisory work involving all phases of systems analysis and design, development, programming and maintenance of data and network systems and the development and implementation of procedures and computer programs to process data by electronic data processing equipment; performs related work as assigned.

ESSENTIAL FUNCTIONS: This list is ILLUSTRATIVE ONLY and is not a comprehensive listing of all functions and tasks performed by incumbents of this class.

TASKS:

Plans, assigns, and reviews work of supervisory and technical staff to maintain adequate staffing levels necessary to respond to fluctuating workloads; evaluates employee performance; provides technical leadership to management for assessment and implementation of new technologies; develops, implements and maintains standards and guidelines for the acquisition, installation and use of computers, local and wide area networks, application systems, and communication and telecommunication systems; develops system and program specifications; sets priorities for assignment to other staff, and coordinates and checks progress of system development and program coding, as needed; reviews and leads major systems development projects and manages on-going maintenance of related systems; designs all major system components such as forms, reports, screen formats, files, and data bases.

Consults with users about system problems and develops specifications to make necessary modifications and oversees implementation; provides consultation to users on computer needs, networking equipment, software, peripherals, file servers and wireless communications; assists users in obtaining computer systems; plans and sets up testing strategies, conditions and schedules; coordinates or performs network design, installation, modification, maintenance, problem resolution, network monitoring and optimization with assistance from technical personnel; evaluates, studies and implements safeguards for computer systems.

Reviews technical journals and relevant literature to stay current with changes in technology; serves as resource and technical advisor in areas, such as data base development and management, high level languages, system software, or data communications.

KNOWLEDGE, SKILLS AND OTHER CHARACTERISTICS:

Knowledge of system analysis and design procedures and techniques.

Knowledge of research techniques, methods and procedures.

Knowledge of the principles, methods and practices of public administration.

Knowledge of current theories principles, and technologies of information processing.

Knowledge of project management methodologies.

Knowledge of the installation, diagnosis, maintenance, and repair of computer WAN, LAN and related systems.

Knowledge of instructional methods, techniques and practices.

Knowledge of the theory and practices of management as applied to government agencies with special emphasis on organizational analysis, procedure analysis, and records management.

Knowledge of programming languages.

Knowledge of information system audit controls.

Knowledge of information system security controls.

Skill in planning and implementing computer systems, services and programs for governmental entities.

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Skill in overseeing and performing systems analysis, programming and customizing software to meet individual users or department needs.

Skill in utilizing written and verbal communication in the development and presentation of reports, strategic plans, budgets, and computer instruction.

Skill in prioritizing, scheduling, assigning, reviewing and evaluating work.

Skill in establishing and maintaining effective working relationships.

Skill in communicating technical concepts to users in understandable language.

Skill in project management, prioritizing and assigning of workload.

Skill in identifying and defining user requirements and conceptualizing workable system to meet those needs.

Skill in feasibility study and cost/benefit analysis methodologies.

Skill in managing large data processing system.

Skill in coordinating and implementing training of staff.

Skill in preparing long range information system plans.

PHYSICAL REQUIREMENTS AND WORK ENVIRONMENTS: Work involves a minimum of physical effort primarily in an office setting.

MINIMUM REQUIREMENTS: A Bachelor's degree in Computer Science, Computer Information Systems, or closely related field; and four (4) years of progressively responsible experience in system and programming including two (2) years of systems development and two (2) years of responsible supervisory experience.

Depending upon the needs of the Nation, some incumbents of the class may be required to demonstrate fluency in both the Navajo and English languages as a condition of employment.